

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTONTWO NEW WOODRATS FROM LOWER CALIFORNIA,
MEXICO.

BY ROBERT T. ORR,

Museum of Vertebrate Zoology, Berkeley, California.

A study of the genus *Neotoma* as represented by specimens in the collection of the Museum of Vertebrate Zoology convinces the writer of the existence of two well-marked geographic forms which have not heretofore been recognized. One of these is a race of *Neotoma* (*Neotoma*) *lepida* Thomas, the other a race of *Neotoma* (*Homodontomys*) *fuscipes* Baird. The measurements here given are to be compared with those given by Goldman (N. Amer. Fauna, no. 31, 1910).

***Neotoma lepida* egressa**, new subspecies.

Type.—Adult male, skin and skull; no. 50142, Mus. Vert. Zool.; one mile east of El Rosario, 200 feet altitude, Lower California, Mexico; collected December 26, 1930, by Chester C. Lamb; original no. 13344.

Range.—Coastal region of northwestern Lower California from latitude 31° N. south at least to El Rosario, latitude 30° 03' N.

Diagnosis.—Size, large in comparison with *Neotoma l. intermedia* or *N. l. felipensis*; color, varying from that of *intermedia* to a tone somewhat paler; skull large with a relatively long slender rostrum and large auditory bullae.

Measurements and weights.—The average and extreme measurements in millimeters of ten adult males from El Rosario, Socorro and San Telmo are as follows: Total length, 344.7 (325-360); tail vertebrae, 157.3 (145-171); hind foot, 34.5 (32-36); basilar length, 37.2 (35.7-39.0); zygomatic breadth, 23.4 (22.2-24.4); interorbital breadth, 5.7 (5.4-5.9); length of nasals, 17.4 (16.6-18.7); length of incisive foramina, 9.6 (9.1-10.5); length of palatal bridge, 7.7 (7.2-8.1); alveolar length of upper molar series, 8.9 (8.4-9.4).

The average and extreme weights in grams of the above ten adult males are 203.5 (117.5-239.0).

Remarks.—The outstanding feature distinguishing *egressa* from all

bordering races is its large size. The specimens from El Rosario are most typical and possess extremely long slender rostra, a character which is not so strongly marked in specimens from farther north along the coast. In respect to color *egressa* may be looked upon as showing evidence of intergradation between the dark coastal *intermedia* and the pallid desert subspecies *felipensis*, although it most nearly resembles the former, equalling it sometimes in dark coloration.

Specimens examined.—A total of 30 from the following localities in Lower California: Colnett, latitude 31° N., 4; San Telmo, 600 feet, 10; San Ramón, mouth of Santo Domingo River, 1; Santo Domingo, 25 feet, 1; Arroyo Nuevo York, 200 feet, 15 miles south of Santo Domingo, 4; Socorro, 20 miles south of San Quintín, 4; 1 mile east of El Rosario, 200 feet, 6.

***Neotoma fuscipes martirensis*, new subspecies.**

Type.—Adult male, skin and skull; no. 35850, Mus. Vert. Zool.; Valadares, altitude 2700 feet, Sierra San Pedro Mártir, Lower California, Mexico; collected April 15, 1925, by A. E. Borell and C. C. Lamb, original no. 1419 A. E. B.

Range.—The Sierra San Pedro Mártir region of Lower California and adjacent west coast north approximately to latitude 32° N.

Diagnosis.—Size small; color similar to that of *N. f. macrotis* but with greater amount of ventral pigmentation; skull lacking angularity; rostrum not noticeably arched, although depressed; when viewed from the side, dorsal outline of diastema relatively straight; auditory bullae large.

Measurements and weights.—The average and extreme measurements in millimeters of seven adults from the Sierra San Pedro Mártir of Lower California are as follows: Total length, 362.1 (335–390); tail vertebrae, 170.9 (156–190); hind foot, 36.0 (33–39); basilar length, 37.1 (36.1–38.8); zygomatic breadth, 23.1 (22.3–24.3); interorbital breadth, 5.6 (5.4–5.8); length of nasals, 17.8 (16.6–19.2); length of incisive foramina, 9.7 (9.3–10.3); length of palatal bridge, 7.8 (7.5–8.4); alveolar length of upper molar series, 8.6 (8.1–9.1).

The average and extreme weights in grams of the above seven specimens are 220.9 (186–260).

Comparison.—When compared with a series of topotypes of *Neotoma fuscipes macrotis*, *martirensis* is seen to differ in the following respects: Size smaller; extent of ventral pigmentation greater, with the terminal bands of the hairs nearest Light Vinaceous-Cinnamon (after Ridgway's Color Standards and Color Nomenclature, 1912) rather than buffy; skull smaller and less angular; rostrum less arched; highest part of skull, at anterior parietal region rather than at naso-frontal junction; incisor slightly more procumbent; outline of diastema relatively straight rather than arched; auditory bullae proportionately larger. [See figs. 1, 2.]

Remarks.—Specimens from Las Cruces, east of Ensenada, resemble *martirensis* as regards ventral pigmentation, small size, absence of angularity of skull, and in possession of proportionally large bullae. However, the rostrum in these individuals is slightly more elevated and rounded, and the

incisors are more incurved than in specimens from the San Pedro Mártir region. Four juvenals from the Sierra Juárez appear, in cranial characters, to be intermediate between *macrotis* and *martirensis*, but in coloration approach nearer to topotypes of *macrotis* of similar age. Hence these specimens are tentatively placed with *macrotis*.

Specimens examined.—A total of 23 from the following localities in Lower California: Valladares, 2700 feet, 3; Aguaje del Sauce, 2600 feet, 6 miles northwest of Valladares, 2; La Grulla, 7200–7500 feet, Sierra San Pedro Mártir, 8; Vallecitos, 8500 feet, Sierra San Pedro Mártir, 1; San José, latitude 31° N., 2300–2500 feet, 5; Concepción, 6000 feet, Sierra San Pedro Mártir, 1; Santo Domingo, 25 feet, 1; Las Cruces, 2600 feet, 20 miles east of Ensenada, 2.



Fig. 1. *Neotoma fuscipes macrotis*, adult male, no. 3132, Mus. Vert. Zool.; San Diego, San Diego Co., Calif. $\times 1$

Fig. 2. *Neotoma fuscipes martirensis*, type, adult male, no. 35850, Mus. Vert. Zool.; Valladares, 2700 feet altitude, Sierra San Pedro Mártir, Lower California. $\times 1$

Note in *martirensis* the straighter outline of rostrum and diastema, the highest part of the skull at the anterior parietal region, and the more procumbent incisors, as compared with *macrotis*.